

Table D3

City of Burbank - Burbank WRP

Receiving Water Data
 Station upstream of Discharge #002 - Burbank Western Channel
 (CA0055531, CI-4424)

CTR												
	Data Source B=BC lab, C=Caltest lab, P=POTW, A = Annual Rept	Residual chlorine	Sulfate	TDS	Temperature	Total Nitrogen	TKN	TSS	Turbidity	Conductivity (not Salinity in ppm)	flow	flow
		mg/L			F	mg/L		mg/L	NTU	(umho/cm)	MGD	cfs
1/1/1999		<0.1			51							
2/4/1999		<0.1	144	624	58	0.42		1.34		926		
3/1/1999		<0.1			60							
4/1/1999		<0.1			55							
5/5/1999		<0.1	169	628	60	1.6		2.14		993		
6/1/1999		<0.1			62							
7/1/1999		<0.1			65							
8/2/1999		<0.1	123	560	64	1.8		4.8		805		
9/1/1999		<0.1			67							
10/1/1999		<0.1			62							
11/10/1999	EC	<0.1	125	780	58	15		2.6		1242		
12/1/1999		<0.1			51							
1/1/2000					53						0.74	
2/15/2000	A		136	420	48	0.6		9.4		677	0.82	
3/1/2000					59						0.97	
4/1/2000					63						1.25	
5/15/00	A		179	892	61	2.5		3.2		1485	2.72	
6/1/00					62						0.85	
7/1/00					66						0.98	
8/8/00	A		142	746	68	<8		24		1214	1.41	
9/1/00					61						0.94	
10/1/00					59						0.96	
11/2/00	A		117	499	56	0.8		3		803	1.08	
12/1/00					52						0.56	
1/30/01	EC											
5/2/01	EC											
7/31/01	C						7			1234	1	
7/31/01	BC						7			1234	1	
8/8/01	EC											
8/22/01	BC							9		962	1.3	
8/22/01	C							9		962	1.3	
9/4/01	BC							41		657	4	
9/4/01	C							41		657	4	
10/2/01	BC							6		949	0.65	
10/2/01	C											
11/2/01	BC							43		1026	0.78	
11/2/01	C											
11/6/01	EC											
12/5/01	BC							3		929	0.44	
12/5/01	C											
1/9/02	C											
1/9/02	BC							5		1035	1	
2/5/02	EC											
2/6/02	BC						1.9			1492	6.5	
2/6/02	C											

DNQ values are in italics.

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 Revised 10/30/06

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 Station upstream of Discharge #002 - Burbank Western Channel
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CTR.	Data Source B=BC lab, C=Caltest lab, P=POTW, A = Annual Rept	Residual chlorine	Sulfate	TDS	Temperature	Total Nitrogen	TKN	TSS	Turbidity	Conductivity (not Salinity in ppm)	flow	flow
		mg/L		F	mg/L		mg/L	NTU	(umho/cm)	MGD	cfs	
3/6/02	C							4		873	6.7	
3/6/02	BC											
4/16/02	C											
4/16/02	BC							1		1027	2.6	
5/7/02	C											
5/7/02	BC									1087	1	
6/6/02	C											
6/6/02	BC							77		1119	0.58	
7/2/02	BC											
7/2/02	C							110		825	1	
8/6/02	EC											
8/7/02	BC							22		1075	1	
8/7/02	C											
9/10/02	BC							8		1167	1	
9/10/02	C											
10/8/02	BC							9		840	1.2	
10/8/02	C											
11/5/02	EC											
11/6/02	BC							20		870	0.97	
11/6/02	C											
12/3/02	BC							2		1029	0.81	
12/3/02	C											
1/1/03		<0.1			62						1.6	
2/4/03	A	0.2	128	606	56	4.3		1.86		883	0.8	
3/1/03		0.2			61						1	
4/1/03		<0.1			64						0.8	
5/6/03	A	0.2	134	724	69	5.1		2.2		1080	1	
6/1/03		0.2			67						1.3	
7/1/03		0.1			77						0.8	
8/5/03	A	0.1	115	1102	73	7.5		5		1512	0.7	
9/1/03		0.1			73						1.2	
10/1/03		0.1			69						0.9	
11/6/03	A	<0.1	98	594	62	2.2		1		653	1.1	
11/6/03												
12/1/03		<0.1			54						0.6	
1/1/04	A	<0.1			54						1.6	
2/10/04	A	<0.1	125	630	57	3.6		4		791	0.5	
3/1/04	A	<0.1			64						1.3	
4/1/04	A	<0.1			64						1	
5/4/04	A	<0.1	101	810	66	6.2		4		1157	1	
5/4/04	EC											
6/1/04	A	<0.1			68						1.4	
7/1/04	A	<0.1			74						1	
8/4/04	A	<0.1	168	718	71	3		12		1001	1.2	
9/1/04	A	<0.1			69						1.1	

DNQ values are in Italics.

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 08/31/06
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CTR												
	Data Source B=BC lab, C=Caltest lab, P=POTW, A = Annual Rept	Residual chlorine	Sulfate	TDS	Temperature	Total Nitrogen	TKN	TSS	Turbidity	Conductivity (not Salinity in ppm)	flow	flow
		mg/L		F	mg/L		mg/L	NTU	(umho/cm)	MGD	cfs	
10/1/04	A	<0.1			66						1.1	
11/2/04	A	<0.1	184	792	59	4.1			2	1211	0.9	
12/1/04	A	<0.1			58						0.7	
1/1/05		<0.1			59						4.3	
2/15/05	A	<0.1	85.4	516	61	2.9			2.2		12.6	
3/1/05		0.1			65						9.7	
4/1/05		<0.1			65						3	
5/12/05	A	<0.1	94.2	516	67	3.4			7.7		1.9	
6/1/05		0.1			74	6.4					2.2	
7/1/05		<0.1			72						1	
8/9/05	A	<0.1	120	634	71	2.9			5.2		2.4	
9/1/05		<0.1			68						0.7	
10/1/05		<0.1			70						1.5	
11/1/05	A	<0.1	154	564	62	1.5			133		0.6	
12/1/05		<0.1			55				16.6		1.2	
2/8/06												
5/2/06	eMR											
MEC												
MAXIMUM		0.2	184	1102	77	7.5	15	110		1512	12.60	0.00
MINIMUM		0.1	85.4	420	48	1.5	0.42	1		653	0.44	0.00
DETECTS		10	20	20	60	13	7	20		37	69.00	0.00
COUNT		48	20	20	60	13	8	20		37	69.00	0.00
%NONDETECT		79.2	0	0	0	0	12.5	0		0	0.00	#DIV/0!
AVE		0.14	132.08	667.75	62.78	4.08	3.25	21.30		1013.03	1.71	#DIV/0!

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, C#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)									HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?	Tier 3 - need limit?	AMELhh = ECA = C hh O	Organisms Only	
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O												AMEL multiplier	MDEL hh
1	Antimony	µg/L	0.8	1.5	NONE	NONE	14	4300	6	6	NO	Go to Tier 2	2	No	Go to tier 3	NO	NO		2.01		
2	Arsenic	µg/L	0.6	8	340	150	NONE	NONE	10	10	NO	Go to Tier 2	50.5	Yes	Yes				2.01		
3	Beryllium	µg/L	0.6	<0.8	NONE	NONE	Narrative	Narrative	4	4	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO				
4	Cadmium**	µg/L	0.2	0.3	11.5	4.7	Narrative	Narrative	5	4.7	NO	Go to Tier 2	2.2	No	Go to tier 3	303(d) Listed & TMDL adopt- ed	YES	NA		NA	
5a	Chromium III*	µg/L	na	na	3360	401	Narrative	Narrative		540	NO	Go to Tier 2	6.9	No	Go to tier 3	NO	NO				
5b	Chromium VI	µg/L	0.4	9	16.3	11.4	Narrative	Narrative	50	11	NO	NO	20	YES	YES			N/A	1.67	N/A	
6	Copper*	µg/L	0.5	64	30	19	1300	NONE		19	YES	YES	150	YES	YES	Reg. Bd TMDL	YES	N/A	1.84	N/A	
7	Lead**	µg/L	0.4	1.9	234	9.1	Narrative	Narrative		9.1	NO	NO	7.1	NO	NO	Reg. Bd. TMDL	YES				
8	Mercury	µg/L	0.6	0.06	Reserved	Reserved	0.05	0.051	2	0.051	NO	NO	0.33	YES	YES			0.051	2.01	0.10251	

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(Discharge #002 - POTW Discharge)
(CA0055531, C#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation	Previous Permit Limits			
			Freshwater				Freshwater				Order 98-052				Order 96-050			
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aq.life	Lowest AMEL	Lowest MDEL		Mo Ave	Daily Max	Mo Ave	Daily Max
1	Antimony	µg/L										--	--	Interim Monitoring - No CTR-based Limit				
2	Arsenic	µg/L	0.321	109.14	0.527	79.05	79.05	1.55	122.528	3.11	245.846	10	--	RP (Tier 2) to exceed the new Federal MCL. Need limit to protect the MUN BU of the groundwater basin.		50 stayed	-	50
3	Beryllium	µg/L										--	--	Interim Monitoring - No CTR-based Limit				
4	Cadmium**	µg/L	0.643	7.3945	0.797	3.7459	3.7459	1.17	4.3827	1.55	5.80615	4.4	5.8	Need limit (Tier 3). RP to exceed the CTR Freshwater Aquatic life criteria. The LA River Metals TMDL contains a WLA for Burbank WRP. SIP procedures used to calc. mo ave and daily max. according to TMDL Implementation section	1 stayed	3.7 stayed	--	10
5a	Chromium III*	µg/L										--	--	Interim Monitoring - No CTR-based Limit				
5b	Chromium VI	µg/L	0.44	7.1690428	0.643	7.3523909	7.169043	1.36	9.7499	2.27	16.2737	9.7	16	Need Limit (Tier 2). RP to exceed the CTR Freshwater Aquatic life criteria.	10 stayed	15 stayed	--	50
6	Copper*	µg/L	0.373	11.19	0.581	11.039	11.039	1.45	16.0066	2.68	29.5845	16	30	Need Limit (Tiers 1, 2 & 3). RP to exceed the CTR Freshwater Aquatic life criteria. The calculated CTR AMEL is the same as the TMDL WLA for copper, but not the MDEL.	11 stayed	17 stayed	--	1000
7	Lead**	µg/L	0.44	102.96	0.643	5.8513	5.8513	1.36	7.95777	2.27	13.2825	8	13	Need limit (Tier 3). RP to exceed the CTR Freshwater Aquatic life criteria. The LA River Metals TMDL contains a WLA for Burbank WRP. SIP procedures used to calc. mo ave and daily max. according to TMDL Implementation section	2.5 stayed	15 stayed	--	50
8	Mercury	µg/L	0.321	NA	0.527	NA	NA	1.55	NA	3.11	NA	0.051	0.1	Need Limit (Tier 2). RP to exceed the CTR Human Health Organisms only criteria.	0.012 stayed	2.1 stayed	--	

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)								HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health											Organisms Only		
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O		Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B	B>C & present In Effl.	Tier 2 - Need limit?	Tier 3 - other Info. ?	Tier 3 - need limit?	AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh
9	Nickel*	µg/L	0.5	11	928	103	610	4600	100	100	NO	Go to Tier 2	20	No	Go to tier 3					
10	Selenium	µg/L	0.5	23	RESERVED		5 Narrative	Narrative	50	5	YES	YES	2.8					NA	2.7	NA
11	Silver*	µg/L	0.5	1.1	16	none	NONE	NONE		16	NO	Go to Tier 2	0.73	No	Go to tier 3	NO	NO			
12	Thallium	µg/L	0.6	<0.1	NONE	NONE	1.7	6.3	2	2	NO	Go to Tier 2	0.09	No	Go to tier 3	NO	NO			
13	Zinc*	µg/L	0.2	121	237	237	none	NONE		237	NO	Go to Tier 2	420	YES	YES	YES	RegBd TMDL	YES	1.33	NA
14	Cyanide	µg/L	0.6	<5	22	5.2	700	220,000	200	5.2	NO	NO	14	NO	NO					
15	Asbestos	Fibers/ L	0.6	<0.2	NONE	NONE	7,000,000	NONE	7x10^6	7x10^6	NO	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO			
16	2,3,7,8-TCDD (Dioxin)	µg/L	0.6	<0.2	NONE	NONE	0.000000013	1.4E-08	3x10^-5	1.4E-08	NO	NO	<0.0017	No	Go to tier 3	NO	NO			
17	Acrolein	µg/L	0.6	<20	NONE	NONE	320	780		780	NO	Go to Tier 2	<20	No	Go to tier 3	NO	NO			
18	Acrylonitrile	µg/L	0.6	<5	NONE	NONE	0.059	0.66		0.66	NO	NO	<5	No	Go to tier 3	NO	NO			

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(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation	Previous Permit Limits			
			Freshwater					Freshwater							Order 98-052	Order 96-050		
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aq.life	Lowest AMEL	Lowest MDEL		Mo Ave	Daily Max	Mo Ave	Daily Max
9	Nickel*	µg/L										--	--	Deleted the limit because there was no RP. New monitoring data (new information) indicated pollutant is not present in the effluent or receiving water. Require interim monitoring.	--	100 stayed	--	100
10	Selenium	µg/L	0.373	#VALUE!	0.581	2.905	2.905	1.45	4.21225	2.68	7.7854	4.2	7.8	Need Limit (Tier 1). RP to exceed the CTR Freshwater Aquatic Life Criteria.	5 stayed	20 stayed	--	10
11	Silver*	µg/L										--	--	No new limit, because there was no RP to exceed the CTR criteria. Deleted the Gold Book-based limit from Order No. 96-050 because the WQO became invalid with USEPA's adoption of the National Recommended Water Quality Criteria: 2002 (EPA-822-R-02-047, November 2002). Require interim monitoring.	--	3.4 stayed	--	50
12	Thallium	µg/L										--	--	Interim Monitoring - No Limit				
13	Zinc*	µg/L	0.643	152.391	0.797	188.889	152.391	1.17	178.297	1.55	236.206	178.3	236.2	Need limit (Tiers 2 & 3). RP to exceed the CTR Freshwater Aquatic life criteria. The LA River Metals TMDL contains a 212 µg/L WLA for Burbank WRP. Calculated limit will be used because WLA was not statistically adjusted.	100 stayed	110 stayed	--	5000
14	Cyanide	µg/L										--	--	Interim Monitoring - No Limit	5.2 stayed	22 stayed	--	200
15	Asbestos	Fibers/L										--	--	Interim Monitoring - No Limit				
16	2,3,7,8-TCDD (Dioxin)	µg/L										--	--	Interim Monitoring - No Limit				
17	Acrolein	µg/L										--	--	Interim Monitoring - No Limit				
18	Acrylonitrile	µg/L										--	--	Interim Monitoring - No Limit				

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City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?	Tier 3 - need limit?	AMELhh = ECA = C hh O	Organisms Only		
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O												MDEL/ AMEL multiplier	MDEL hh	
19	Benzene	µg/L	0.6	<0.5	NONE	NONE	1.2	71	1	1	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
20	Bromoform	µg/L	0.6	67	NONE	NONE	4.3	360		360	NO	Go to Tier 2	<2.1	No	Go to tier 3	NO	NO					
21	Carbon Tetrachloride	µg/L	0.6	0.14	NONE	NONE	0.25	4.4	0.5	0.5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
22	Chlorobenzene	µg/L	0.6	<0.5	NONE	NONE	680	21,000		21,000	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
23	Dibromochloromethane	µg/L	0.2	110	NONE	NONE	0.401	34		34	YES	YES	4.6					34	1.33	45		
24	Chloroethane	µg/L	0.6	<0.5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	0.8	NA	Go to tier 3	NO	NO					
25	2-chloroethyl vinyl ether	µg/L	0.6	<10	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<10	NA	Go to tier 3	NO	NO					
26	Chloroform	µg/L	0.3	30	NONE	NONE	Reserved	Reserved		Reserved	No Criteria Available	Go to Tier 2	3.4	NA	Go to tier 3	NO	NO					
27	Dichlorobromomethane	µg/L	0.2	67	NONE	NONE	0.56	46		46	YES	YES	2.8					46	1.33	61		
28	1,1-Dichloroethane	µg/L	0.6	<0.5	NONE	NONE	NONE	NONE	5	5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
29	1,2-dichloroethane	µg/L	0.6	<0.5	NONE	NONE	0.38	99	0.5	0.5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
30	1,1-Dichloroethylene	µg/L	0.6	<0.5	NONE	NONE	0.057	3.2	6	3.2	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
31	1,2-dichloropropane	µg/L	0.6	<0.5	NONE	NONE	0.52	39	5	5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
32	1,3-dichloropropylene	µg/L	0.6	<0.5	NONE	NONE	10	1,700	0.5	0.5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
33	Ethylbenzene	µg/L	0.6	<0.5	NONE	NONE	3100	29,000	300	0.7	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
34	Methyl bromide	µg/L	1.4	7.8	NONE	NONE	48	4,000		4,000	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
35	Methyl chloride	µg/L	0.6	0.52	NONE	NONE	Narrative	Narrative		Narrative	No Criteria Available	Go to Tier 2	<0.5		Go to tier 3	NO	NO					
36	Methylene chloride	µg/L	0.6	1.8	NONE	NONE	4.7	1,600		1,600	NO	Go to Tier 2	3	No	Go to tier 3	NO	NO					
37	1,1,2,2-tetrachloroethane	µg/L	0.6	<0.5	NONE	NONE	0.17	11	1	1	NO	NO	<0.5									
38	Tetrachloroethylene	µg/L	0.6	1	NONE	NONE	0.8	8.85	5	5	NO	NO	<0.5									

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(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation	Previous Permit Limits			
			Freshwater					Freshwater							Order 98-052	Order 96-050		
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aq.life	Lowest AMEL	Lowest MDEL		Mo Ave	Daily Max	Mo Ave	Daily Max
19	Benzene	µg/L										--	--	Interim Monitoring - No Limit				
20	Bromoform	µg/L										--	--	Interim Monitoring - No Limit	--	100 stayed		
21	Carbon Tetrachloride	µg/L										--	--	Interim Monitoring - No Limit				
22	Chlorobenzene	µg/L										--	--	Interim Monitoring - No Limit				
23	Dibromochloromethane	µg/L	0.643	NA	0.797	NA	NA	1.17	NA	1.55	NA	34.0	45.2	Need Limit (Tier 1) RP to exceed CTR Human health organisms only criteria	--	100 stayed		
24	Chloroethane	µg/L										--	--	No Limit - No Criteria Available				
25	2-chloroethyl vinyl ether	µg/L										--	--	No Limit - No Criteria Available				
26	Chloroform	µg/L										--	--	No Limit - No Criteria Available	--	100 stayed		
27	Dichlorobromomethane	µg/L	0.643	NA	0.797	NA	NA	1.17	NA	1.55	NA	46	61	Need Limit (Tier 1) RP to exceed CTR Human health organisms only criteria	--	100 stayed		
28	1,1-Dichloroethane	µg/L										--	--	Interim Monitoring - No Limit				
29	1,2-dichloroethane	µg/L										--	--	Interim Monitoring - No Limit	--	0.5 stayed		
30	1,1-Dichloroethylene	µg/L										--	--	Interim Monitoring - No Limit				
31	1,2-dichloropropane	µg/L										--	--	Interim Monitoring - No Limit				
32	1,3-dichloropropylene	µg/L										--	--	Interim Monitoring - No Limit				
33	Ethylbenzene	µg/L										--	--	Interim Monitoring - No Limit	--	700 stayed		
34	Methyl bromide	µg/L										--	--	Interim Monitoring - No Limit				
35	Methyl chloride	µg/L										--	--	No Limit - No Criteria Available				
36	Methylene chloride	µg/L										--	--	Interim Monitoring - No Limit	--	5 stayed		
37	1,1,2,2-tetrachloroethane	µg/L										--	--	Interim Monitoring - No Limit				
38	Tetrachloroethylene	µg/L										--	--	Interim Monitoring - No Limit	--	5 stayed		

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?	Tier 3 - need limit?	Organisms Only			
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O											AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	
39	Toluene	µg/L	0.6	<0.5	NONE	NONE	6800	200,000	150	150	NO	Go to Tier 2	0.26	No	Go to tier 3	NO	NO					
40	Trans 1,2-Dichloroethylene	µg/L	0.6	<0.5	NONE	NONE	700	140,000	10	10	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
41	1,1,1-Trichloroethane	µg/L	0.6	<0.5	NONE	NONE	Narrative	Narrative	200	200	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
42	1,1,2-trichloroethane	µg/L	0.6	<0.5	NONE	NONE	0.6	42	5	5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
43	Trichloroethylene	µg/L	0.6	<0.5	NONE	NONE	2.7	81	5	5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
44	Vinyl chloride	µg/L	0.6	<0.5	NONE	NONE	2	525	0.5	0.5	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
45	2-chlorophenol	µg/L	0.6	<2	NONE	NONE	120	400		400	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
46	2,4-dichlorophenol	µg/L	0.6	<1	NONE	NONE	93	790		790	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
47	2,4-dimethylphenol	µg/L	0.6	<2	NONE	NONE	540	2,300		2,300	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	µg/L	0.6	<5	NONE	NONE	13.4	765		765	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
49	2,4-dinitrophenol	µg/L	0.6	<5	NONE	NONE	70	14,000		14,000	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
50	2-nitrophenol	µg/L	0.6	<2	NONE	NONE	NONE	NONE		None	No Criteria Available	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
51	4-nitrophenol	µg/L	0.6	<2	NONE	NONE	NONE	NONE		None	No Criteria Available	Go to Tier 2	0.5	No	Go to tier 3	NO	NO					
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	µg/L	0.6	<1	NONE	NONE	NONE	NONE		None	No Criteria Available	Go to Tier 2	9.3	No	Go to tier 3	NO	NO					
53	Pentachlorophenol	µg/L	0.6	<1	pH dependent	pH dependent	0.28	8.2	1	1	NO	Go to Tier 2	0.6	No	Go to tier 3	NO	NO					
54	Phenol	µg/L	0.6	<1	NONE	NONE	21,000	4,600,000		4.6x10^6	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
55	2,4,6-trichlorophenol	µg/L	0.6	<5	NONE	NONE	2.1	6.5		6.5	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
56	Acenaphthene	µg/L	0.6	<2	NONE	NONE	1200	2,700		2,700	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
57	Acenaphthylene	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
58	Anthracene	µg/L	0.6	<2	NONE	NONE	9600	110,000		110,000	NO	Go to Tier 2	<0.1	No	Go to tier 3	NO	NO					
59	Benzidine	µg/L	0.6	<5	NONE	NONE	0.00012	0.00054		0.00054	ND>C	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
60	Benzo(a)Anthracene	µg/L	0.6	<2	NONE	NONE	0.0044	0.049		0.049	ND>C	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
61	Benzo(a)Pyrene	µg/L	0.6	<2	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
62	Benzo(b)Fluoranthene	µg/L	0.6	<2	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank - Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS					PROPOSED LIMITS		Recommendation	Previous Permit Limits			
			Freshwater					Freshwater								Order 98-052		Order 96-050	
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aq.life	Lowest AMEL	Lowest MDEL	Mo Ave		Daily Max	Mo Ave	Daily Max	
39	Toluene	ug/L										--	--	Interim Monitoring - No Limit	--	150 stayed			
40	Trans 1,2-Dichloroethylene	ug/L										--	--	Interim Monitoring - No Limit					
41	1,1,1-Trichloroethane	ug/L										--	--	Interim Monitoring - No Limit					
42	1,1,2-trichloroethane	ug/L										--	--	Interim Monitoring - No Limit					
43	Trichloroethylene	ug/L										--	--	Interim Monitoring - No Limit					
44	Vinyl chloride	ug/L										--	--	Interim Monitoring - No Limit					
45	2-chlorophenol	ug/L										--	--	Interim Monitoring - No Limit					
46	2,4-dihlorophenol	ug/L										--	--	Interim Monitoring - No Limit					
47	2,4-dimethylphenol	ug/L										--	--	Interim Monitoring - No Limit					
48	4,6-dinitro-o-resol (aka 2-methyl-4,6-Dinitrophenol)	ug/L										--	--	Interim Monitoring - No Limit					
49	2,4-dinitrophenol	ug/L										--	--	Interim Monitoring - No Limit					
50	2-nitrophenol	ug/L										--	--	No Criteria Available					
51	4-nitrophenol	ug/L										--	--	No Criteria Available					
52	3-Methyl-4-Chlorophenol (aka P-chloro-m-resol)	ug/L										--	--	No Criteria Available					
53	Pentachlorophenol	ug/L										--	--	Interim Monitoring - No Limit					
54	Phenol	ug/L										--	--	Interim Monitoring - No Limit					
55	2,4,6-trihlorophenol	ug/L										--	--	Interim Monitoring - No Limit					
56	Acenaphthene	ug/L										--	--	Interim Monitoring - No Limit					
57	Acenaphthylene	ug/L										--	--	No Criteria Available					
58	Anthracene	ug/L										--	--	Interim Monitoring - No Limit					
59	Benzidine	ug/L										--	--	Interim Monitoring - No Limit					
60	Benzo(a)Anthracene	ug/L										--	--	Interim Monitoring - No Limit					
61	Benzo(a)Pyrene	ug/L										--	--	Interim Monitoring - No Limit					
62	Benzo(b)Fluoranthene	ug/L										--	--	Interim Monitoring - No Limit					

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other Info. ?	Tier 3 - need limit?	Organisms Only			
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O											AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	
63	Benzo(ghi)Perylene	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
64	Benzo(k)Fluoranthene	µg/L	0.6	<2	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
65	Bis(2-Chloroethoxy) methane	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
66	Bis(2-Chloroethyl) Ether	µg/L	0.6	<1	NONE	NONE	0.031	1.4		1.4	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
67	Bis(2-Chloroisopropyl) Ether	µg/L	0.6	<1	NONE	NONE	1400	170,000		170,000	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
68	Bis(2-Ethylhexyl) Phthalate	µg/L	1.4	28	NONE	NONE	1.8	5.9	4	4	YES	YES	5	YES	YES			5.9	2.83	17		
69	4-Bromophenyl Phenyl Ether	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
70	Butylbenzyl Phthalate	µg/L	0.6	<2	NONE	NONE	3000	5,200		5,200	NO	Go to Tier 2	0.9	No	Go to tier 3	NO	NO					
71	2-Chloronaphthalene	µg/L	0.6	<2	NONE	NONE	1700	4,300		4,300	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
72	4-Chlorophenyl Phenyl Ether	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
73	Chrysene	µg/L	0.6	<2	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<0.3	No	Go to tier 3	NO	NO					
74	Dibenzo(a,h)Anthracene	µg/L	0.6	<3	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<0.6	No	Go to tier 3	NO	NO					
75	1,2-Dichlorobenzene	µg/L	0.6	<0.5	NONE	NONE	2700	17,000	600	600	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
76	1,3-Dichlorobenzene	µg/L	0.6	<0.5	NONE	NONE	400	2,600		2,600	NO	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
77	1,4-Dichlorobenzene	µg/L	0.1	1.1	NONE	NONE	400	2,600	5	5	NO	Go to Tier 2	0.4	No	Go to tier 3	NO	NO					
78	3,3'-Dichlorobenzidine	µg/L	0.6	<5	NONE	NONE	0.04	0.077		0.077	ND>C	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
79	Diethyl Phthalate	µg/L	0.6	<2	NONE	NONE	23000	120,000		120,000	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
80	Dimethyl Phthalate	µg/L	0.6	<2	NONE	NONE	313000	2,900,000		2.9x10^6	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
81	Di-n-Butyl Phthalate	µg/L	0.6	<2	NONE	NONE	2700	12,000		12,000	NO	Go to Tier 2	7.7	No	Go to tier 3	NO	NO					
82	2,4-Dinitrotoluene	µg/L	0.6	<2	NONE	NONE	0.11	9.1		9.1	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
83	2,6-Dinitrotoluene	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
84	Di-n-Octyl Phthalate	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	2	No	Go to tier 3	NO	NO					

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation	Previous Permit Limits			
			Freshwater				Lowest LTA	Freshwater			Lowest AMEL	Lowest MDEL	Order 98-052		Order 96-050			
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic		AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)						MDEL aq.life		
63	Benzo(ghi)Perylene	µg/L										--	--	No Criteria Available				
64	Benzo(k)Fluoranthene	µg/L										--	--	Interim Monitoring - No Limit				
65	Bis(2-Chloroethoxy) methane	µg/L										--	--	No Criteria Available				
66	Bis(2-Chloroethyl)Ether	µg/L										--	--	Interim Monitoring - No Limit				
67	Bis(2-Chloroisopropyl) Ether	µg/L										--	--	Interim Monitoring - No Limit				
68	Bis(2-Ethylhexyl) Phthalate	µg/L										5.9	17	Need limit (Tiers 1 & 2). RP to exceed CTR human health criteria for surface water & RP to exceed Basin Plan 4 µg/L WQO for GWR protection.	--	4 stayed		
69	4-Bromiophenyl Phenyl Ether	µg/L										--	--	No Criteria Available				
70	Butylbenzyl Phthalate	µg/L										--	--	Interim Monitoring - No Limit				
71	2-Chloronaphthalene	µg/L										--	--	Interim Monitoring - No Limit				
72	4-Chlorophenyl Phenyl Ether	µg/L										--	--	No Criteria Available				
73	Chrysene	µg/L										--	--	Interim Monitoring - No Limit				
74	Dibenzo(a,h)Anthracene	µg/L										--	--	Interim Monitoring - No Limit				
75	1,2-Dichlorobenzene	µg/L										--	--	Interim Monitoring - No Limit				
76	1,3-Dichlorobenzene	µg/L										--	--	Interim Monitoring - No Limit				
77	1,4-Dichlorobenzene	µg/L										--	--	Interim Monitoring - No Limit	--	5 stayed		
78	3,3'-Dichlorobenzidine	µg/L										--	--	Interim Monitoring - No Limit				
79	Diethyl Phthalate	µg/L										--	--	Interim Monitoring - No Limit				
80	Dimethyl Phthalate	µg/L										--	--	Interim Monitoring - No Limit				
81	Di-n-Butyl Phthalate	µg/L										--	--	Interim Monitoring - No Limit				
82	2,4-Dinitrotoluene	µg/L										--	--	Interim Monitoring - No Limit				
83	2,6-Dinitrotoluene	µg/L										--	--	No Criteria Available				
84	Di-n-Octyl Phthalate	µg/L										--	--	No Criteria Available				

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?	Tier 3 - need limit?	AMELhh = ECA = C hh O	Organisms Only		
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O												MDEL/ AMEL multiplier	MDEL hh	
85	1,2-Diphenylhydrazine	µg/L	0.6	<1	NONE	NONE	0.04	0.54		0.54	NO	Go to Tier 2	<1		Go to tier 3	NO	NO					
86	Fluoranthene	µg/L	0.6	<2	NONE	NONE	300	370		370	NO	Go to Tier 2	0.1	No	Go to tier 3	NO	NO					
87	Fluorene	µg/L	0.6	<2	NONE	NONE	1300	14,000		14,000	NO	Go to Tier 2	<0.4	No	Go to tier 3	NO	NO					
88	Hexachlorobenzene	µg/L	0.6	<1	NONE	NONE	0.00075	0.00077		0.00077	ND>C	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
89	Hexachlorobutadiene	µg/L	0.6	<1	NONE	NONE	0.44	50		50	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
90	Hexachlorocyclopentadiene	µg/L	0.6	<1	NONE	NONE	240	17,000		17,000	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
91	Hexachloroethane	µg/L	0.6	<2	NONE	NONE	1.9	8.9		8.9	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
92	Indeno(1,2,3-cd)Pyrene	µg/L	0.6	<2	NONE	NONE	0.0044	0.049		0.049	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
93	Isophorone	µg/L	0.6	<1	NONE	NONE	8.4	600		600	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
94	Napthalene	µg/L	0.6	<0.5	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<0.5	No	Go to tier 3	NO	NO					
95	Nitrobenzene	µg/L	0.6	<1	NONE	NONE	17	1,900		1,900	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
96	N-Nitrosodimethylamine	µg/L	0.6	<2	NONE	NONE	0.00069	8.1		8.1	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
97	N-Nitrosodi-n-Propylamine	µg/L	0.6	<2	NONE	NONE	0.005	1.4		1.4	NO	Go to Tier 2	<5	No	Go to tier 3	NO	NO					
98	N-Nitrosodiphenylamine	µg/L	0.6	<1	NONE	NONE	5	16		16	NO	Go to Tier 2	<1	No	Go to tier 3	NO	NO					
99	Phenanthrene	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	0.06	NA	Go to tier 3	NO	NO					
100	Pyrene	µg/L	0.6	<2	NONE	NONE	960	11,000		11,000	NO	Go to Tier 2	<2	No	Go to tier 3	NO	NO					
101	1,2,4-Trichlorobenzene	µg/L	0.6	<2	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<5	NA	Go to tier 3	NO	NO					
102	Aldrin	µg/L	0.6	<0.005	NONE	NONE	0.00013	0.00014		0.00014	ND>C	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO					
103	alpha-BHC	µg/L	0.6	<0.005	NONE	NONE	0.0039	0.013		0.013	NO	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO					
104	beta-BHC	µg/L	0.6	<0.005	NONE	NONE	0.014	0.046		0.046	NO	NO	<0.005									
105	gamma-BHC (aka Lindane)	µg/L	0.6	0.088	0.95	NONE	0.019	0.063	0.2	0.063	YES	YES	0.021					0.063	2.01	0.13		
106	delta-BHC	µg/L	0.6	<0.005	NONE	NONE	NONE	NONE		NONE	No Criteria Available	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO					
107	Chlordane	µg/L	0.6	<0.5	2.4	0.0043	0.00057	0.00059		0.00059	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO					
108	4,4'-DDT	µg/L	0.6	<0.005	1.1	0.001	0.00059	0.00059		0.00059	ND>C	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO					

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS				AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation	Previous Permit Limits				
			Freshwater				Freshwater							Order 98-052	Order 96-050			
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aq.life	Lowest AMEL		Lowest MDEL	Mo Ave	Daily Max	Mo Ave	Daily Max
85	1,2-Diphenylhydrazine	µg/L									--	--	Interim Monitoring - No Limit. RPA incomplete, need B.					
86	Fluoranthene	µg/L									--	--	Interim Monitoring - No Limit					
87	Fluorene	µg/L									--	--	Interim Monitoring - No Limit					
88	Hexachlorobenzene	µg/L									--	--	Interim Monitoring - No Limit					
89	Hexachlorobutadiene	µg/L									--	--	Interim Monitoring - No Limit					
90	Hexachlorocyclopentadiene	µg/L									--	--	Interim Monitoring - No Limit					
91	Hexachloroethane	µg/L									--	--	Interim Monitoring - No Limit					
92	Indeno(1,2,3-cd)Pyrene	µg/L									--	--	Interim Monitoring - No Limit					
93	Isophorone	µg/L									--	--	Interim Monitoring - No Limit					
94	Napthalene	µg/L									--	--	No Criteria Available					
95	Nitrobenzene	µg/L									--	--	Interim Monitoring - No Limit					
96	N-Nitrosodimethylamine	µg/L									--	--	Interim Monitoring - No Limit					
97	N-Nitrosodi-n-Propylamine	µg/L									--	--	Interim Monitoring - No Limit					
98	N-Nitrosodiphenylamine	µg/L									--	--	Interim Monitoring - No Limit					
99	Phenanthrene	µg/L									--	--	Interim Monitoring - No Limit					
100	Pyrene	µg/L									--	--	Interim Monitoring - No Limit					
101	1,2,4-Trichlorobenzene	µg/L									--	--	Interim Monitoring - No Limit					
102	Aldrin	µg/L									--	--	Interim Monitoring - No Limit					
103	alpha-BHC	µg/L									--	--	Interim Monitoring - No Limit					
104	beta-BHC	µg/L									--	--	Interim Monitoring - No Limit					
105	gamma-BHC (aka Lindane)	µg/L	0.321	0.30495	0.527	#VALUE!	0.305	1.55	0.47275	3.11	0.94855	0.063	0.13	Need Limit (Tier 1) RP to exceed CTR Human health organisms only criteria	0.08 stayed	0.2 stayed	--	4
106	delta-BHC	µg/L										--	--	Interim Monitoring - No Limit				
107	Chlordane	µg/L										--	--	Interim Monitoring - No Limit				
108	4,4'-DDT	µg/L										--	--	Interim Monitoring - No Limit				

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)								HUMAN HEALTH CALCULATIONS			
					Freshwater		Human Health			Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need llmit?	B	B>C & present in Effl.	Tier 2 - Need llmit?	Tier 3 - other Info. ?	Tier 3 - need llmit?	Organisms Only		
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O											AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh
109	4,4'-DDE	µg/L	0.6	<0.005	NONE	NONE	0.00059	0.00059		0.00059	NO	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO				
110	4,4'-DDD	µg/L	0.6	<0.005	NONE	NONE	0.00083	0.00084		0.00083	ND>C	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO				
111	Dieldrin	µg/L	0.6	<0.005	0.24	0.056	0.00014	0.00014		0.00014	ND>C	Go to Tier 2	<0.02	No	Go to tier 3	NO	NO				
112	alpha-Endosulfan	µg/L	0.6	<0.005	0.22	0.056	110	240		0.056	NO	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO				
113	beta-Endosulfan	µg/L	0.6	<0.005	0.22	0.056	110	240		0.056	NO	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO				
114	Endosulfan Sulfate	µg/L	0.6	<0.005	NONE	NONE	110	240		240	NO	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO				
115	Endrin	µg/L	0.6	<0.005	0.086	0.036	0.76	0.81		0.036	NO	Go to Tier 2	<0.01	No	Go to tier 3	NO	NO				
116	Endrin Aldehyde	µg/L	0.6	<0.005	NONE	NONE	0.76	0.81		0.81	NO	Go to Tier 2	<0.01	No	Go to tier 3	NO	NO				
117	Heptachlor	µg/L	0.6	<0.005	0.52	0.0038	0.00021	0.00021		0.00021	ND>C	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO				
118	Heptachlor Epoxide	µg/L	0.6	<0.005	0.52	0.0038	0.0001	0.00011		0.00011	ND>C	Go to Tier 2	<0.005	No	Go to tier 3	NO	NO				
	Polychlorinated biphenyls (PCBs)	µg/L													Go to tier 3	NO	NO				
119	Aroclor 1016	µg/L	0.6	<0.2	NONE	0.014	0.00017	0.00017		0.00017	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO				
120	Aroclor 1221	µg/L	0.6	<0.2	NONE	0.014	0.00017	0.00017		0.00017	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO				
121	Aroclor 1232	µg/L	0.6	<0.2	NONE	0.014	0.00017	0.00017		0.00017	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO				
122	Aroclor 1242	µg/L	0.6	<0.2	NONE	0.014	0.00017	0.00017		0.00017	ND>C	Go to Tier 2	>0.2	No	Go to tier 3	NO	NO				
123	Aroclor 1248	µg/L	0.6	<0.2	NONE	0.014	0.00017	0.00017		0.00017	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO				
124	Aroclor 1254	µg/L	0.6	<0.2	NONE	0.014	0.00017	0.00017		0.00017	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO				
125	Aroclor 1260	µg/L	0.6	<0.2	NONE	0.014	0.00017	0.00017		0.00017	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO				
126	Toxaphene	µg/L	0.6	<1	0.73	0.0002	0.0073	0.00075	3	0.00075	ND>C	Go to Tier 2	<0.2	No	Go to tier 3	NO	NO				
FOOTNOTE:																					

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation	Previous Permit Limits			
			ECA acute multiplier (p.7)	Freshwater			Lowest LTA	AMEL multiplier (n=4)	Freshwater		Lowest AMEL				Lowest MDEL	Order 98-052		Order 96-050
				LTA acute	ECA chronic multiplier	LTA chronic			AMEL aq.life	MDEL multiplier (n=4)		MDEL aqlife	Mo Ave			Daily Max	Mo Ave	Daily Max
109	4,4'-DDE	µg/L										--	--	Interim Monitoring - No Limit				
110	4,4'-DDD	µg/L										--	--	Interim Monitoring - No Limit				
111	Dieldrin	µg/L										--	--	Interim Monitoring - No Limit				
112	alpha-Endosulfan	µg/L										--	--	Interim Monitoring - No Limit				
113	beta-Endosulfan	µg/L										--	--	Interim Monitoring - No Limit				
114	Endosulfan Sulfate	µg/L										--	--	Interim Monitoring - No Limit				
115	Endrin	µg/L										--	--	Deleted limit from Order No. 96-050 because no RPA. New monitoring data (new information) indicated pollutant is not present in the effluent or receiving water. Require interim monitoring.	0.0023 stayed	0.18 stayed	--	0.2
116	Endrin Aldehyde	µg/L										--	--	Interim Monitoring - No Limit				
117	Heptachlor	µg/L										--	--	Interim Monitoring - No Limit				
118	Heptachlor Epoxide	µg/L										--	--	Interim Monitoring - No Limit				
	Polychlorinated biphenyls (PCBs)	µg/L										--	--	Interim Monitoring - No Limit				
119	Aroclor 1016	µg/L										--	--	Interim Monitoring - No Limit				
120	Aroclor 1221	µg/L										--	--	Interim Monitoring - No Limit				
121	Aroclor 1232	µg/L										--	--	Interim Monitoring - No Limit				
122	Aroclor 1242	µg/L										--	--	Interim Monitoring - No Limit				
123	Aroclor 1248	µg/L										--	--	Interim Monitoring - No Limit				
124	Aroclor 1254	µg/L										--	--	Interim Monitoring - No Limit				
125	Aroclor 1260	µg/L										--	--	Interim Monitoring - No Limit				
126	Toxaphene	µg/L										--	--	Interim Monitoring - No Limit			--	5
FOOTNOTE:																		

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	CV	MEC	CTR CRITERIA				Basin Plan	REASONABLE POTENTIAL ANALYSIS (RPA)										HUMAN HEALTH CALCULATIONS		
					Freshwater		Human Health													Organisms Only		
					C acute = CMC tot	C chronic = CCC tot	Not applicable C hh W&O	C hh O		Title 22 GWR	Lowest C	MEC >= Lowest C	Tier 1 - Need limit?	B	B>C & present in Effl.	Tier 2 - Need limit?	Tier 3 - other info. ?	Tier 3 - need limit?	AMELhh = ECA = C hh O	MDEL/ AMEL multiplier	MDEL hh	
*	These metals are hardness dependent. CTR criteria was calculated using an average receiving water hardness of 224 mg/L at station R2. Individual hardness values were capped at 400 mg/L, pursuant to CTR.																					
**	These metals are hardness dependent. CTR criteria was calculated using the hardness of 229 mg/L according to the TMDL staff report, since RPA was Tier 3, triggered by the TMDL existence..																					

TABLE R1
Reasonable Potential Analysis and Limit Derivation
Using SIP Methodology
City of Burbank -Burbank Water Reclamation Plant
(Discharge #002 - POTW Discharge)
(CA0055531, CI#4424)

CTR#	DATE	Units	AQUATIC LIFE CALCULATIONS					AQUATIC LIFE CALCULATIONS				PROPOSED LIMITS		Recommendation	Previous Permit Limits			
			Freshwater					Freshwater							Order 98-052		Order 96-050	
			ECA acute multiplier (p.7)	LTA acute	ECA chronic multiplier	LTA chronic	Lowest LTA	AMEL multiplier (n=4)	AMEL aq.life	MDEL multiplier (n=4)	MDEL aq.life	Lowest AMEL	Lowest MDEL		Mo Ave	Daily Max	Mo Ave	Daily Max
	These metals are hardness dependent. CTR criteria was calculated using an average receiving water hardness of 224 mg/L at station R2. Individual hardness values were capped at 400 mg/L, pursuant to CTR.																	
**	These metals are hardness dependent. CTR criteria was calculated using the hardness of 229 mg/L according to the TMDL staff report, since RPA was Tier 3, triggered by the TMDL existence.																	

Table R2

City of Burbank - Burbank Water Reclamation Plant
REASONABLE POTENTIAL ANALYSIS
 using
Technical Support Document (TSD) Methodology

CONSTITUENT	Units	Number of Samples	Maximum Observed Effluent Concentration	CV	Multiplier	Projected Maximum Effluent Concentration (99/99)	Dilution Ratio	Projected Maximum Receiving Water Concentration	Water Quality Objective	HP-Human health protection AP-Aquatic life protection	REASONABLE POTENTIAL
Chronic Toxicity Survival	TUc	31	5.56	0.7	2.18	12.14	0	12.14	1	AP	YES
Nitrate N + Nitrite N	mg/L	33	6	0.3	1.42	8.54	0	8.54	7.2	AP	YES
Aluminum	µg/L	10	96	0.4	2.15	206.80	0	206.80	1000	HH	NO
Arsenic	µg/L	13	8	0.6	2.71	21.67	0	21.67	10	HH	YES
Barium	µg/L	10	40	0.2	1.48	59.35	0	59.35	1000	HH	NO
Fluoride	mg/L	31	0.5	0.2	1.28	0.64	0	0.64	2	HH	NO
Total trihalomethanes	µg/L	12	228	0.2	1.44	329.22	0	329.22	80	HH	YES
Iron	µg/L	31	230	0.6	1.99	456.75	0	456.75	300	HH	YES
Manganese	µg/L	31	15	0.5	1.79	26.91	0	26.91	50	HH	NO
Methoxychlor	µg/L	10	0.005	0.6	3.02	0.02	0	0.02	30	HH	NO
MTBE	µg/L	11	0.5	0.6	2.90	1.45	0	1.45	13	HH	NO
2,4-D	µg/L	10	0.5	0.6	3.02	1.51	0	1.51	70	HH	NO
2,4,5-TP (Silvex)	µg/L	10	0.005	0.6	3.02	0.02	0	0.02	50	HH	NO

FS -Table R2

* Effluent limits are prescribed for constituents which have reasonable potential to exceed non-CTR criteria, using the TSD RPA methodology.

8/31/06
 Revised 10/30/06

Table R3
City of Burbank - Burbank WRP

Total Recoverable Metals Criteria
(CA0055531, CI#4424)

Pollutant	HARDNESS (mg/L)	Freshwater						Freshwater					
		CMC or Acute						CCC or Chronic					
		CMC = WER x Conversion Factor x (exp {mA [ln(Hardness)] + bA})						CCC = WER x Conversion Factor x (exp {mC [ln(hardness)]+ bC})					
		WER	Conversion Factor*	mA	bA	Total Recoverable Limit (µg/L)	Dissolved Fraction Limit (µg/L)	WER	Conversion Factor	mC	bC	Total Recoverable Limit (µg/L)	Dissolved Fraction Limit (µg/L)
Cadmium	229	1	0.909336	1.128	-3.6867	11.50	10.46	1	0.874336	0.7852	-2.715	4.72	4.13
Copper	224	1	0.96	0.9422	-1.7	29.93	28.73	1	0.96	0.8545	-1.702	18.58	17.84
Chromium III	224	1	0.316	0.819	3.688	3361.48	1062.23	1	0.86	0.819	1.561	400.67	344.58
Lead	229	1	0.670271	1.273	-1.46	234.42	157.13	1	0.670271	1.273	-4.705	9.14	6.12
Nickel	224	1	0.998	0.846	2.255	928.20	926.35	1	0.997	0.846	0.0584	103.20	102.89
Silver	224	1	0.85	1.72	-6.52	16.25	13.81	1	none	none	none	#VALUE!	#VALUE!
Zinc	224	1	0.978	0.8473	0.884	237.29	232	1	0.986	0.8473	0.884	237	233.97

ATTACHMENT T

**State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

**MONITORING AND REPORTING PROGRAM NO. CI-4424
FOR
CITY OF BURBANK
(Burbank Water Reclamation Plant)
(NPDES NO. CA0055531)**

The City of Burbank (Discharger) shall implement this monitoring and reporting program the first of the month following the month of the effective date of this Order.

I. SUBMITTAL OF MONITORING REPORTS

1. All monthly monitoring reports must be received by the fifteenth day of the second month following each monthly sampling period.
2. By April 15th of each year, the Discharger shall submit an annual summary report containing a discussion of the previous year's effluent and receiving water monitoring data, as well as graphical and tabular summaries of the data. The first annual report under this Program shall be received at the Regional Board by April 15, 2008, and will cover the monitoring period of calendar year 2007. The Regional Board may request electronic submittal of data at any time.
3. Each monitoring report shall contain a separate section titled "Summary of Non-Compliance" which discusses the compliance record and the corrective actions taken or planned that may be needed to bring the discharge into full compliance with waste discharge requirements. This section shall clearly list all non-compliance with discharge requirements, as well as all excursions of effluent limitations.
4. Each annual monitoring report shall contain a separate section titled "Reasonable Potential Analysis" which discusses whether or not reasonable potential was triggered for pollutants which do not have a final effluent limitation in the NPDES permit. This section shall contain the following statement: "The analytical results for this sampling period did/ did not trigger reasonable potential." If reasonable potential was triggered, then the following information should also be provided:
 - a. A list of the pollutant(s) that triggered reasonable potential;
 - b. The Basin Plan or CTR criteria that was exceeded for each given pollutant;
 - c. The concentration of the pollutant(s);
 - d. The test method used to analyze the sample; and
 - e. The date and time of sample collection.
5. All monitoring and annual summary reports must be addressed to the Regional Board, Attention: Information Technology Unit. Reference the reports to Compliance File No. CI-4424 to facilitate routing to the appropriate staff and file.

6. Database Management System: The Regional Board and the State Water Resources Control Board (State Board) are developing a database compliance monitoring management system that may require the Discharger to submit the monitoring and annual summary reports electronically when it becomes fully operational.

II. MONITORING REQUIREMENTS

1. All samples shall be representative of the waste discharge under conditions of peak load. Quarterly effluent analyses shall be performed during the months of February, May, August, and November. Semiannual analyses shall be performed during the months of February and August. Annual analyses shall be performed during the month of August. Should there be instances when monitoring could not be done during these specified months, the Discharger must notify the Regional Board, state the reason why monitoring could not be conducted, and obtain approval from the Executive Officer for an alternate schedule. Results of quarterly, semiannual, and annual analyses shall be reported in the monthly monitoring report following the analysis.
2. Pollutants shall be analyzed using the analytical methods described in 40 CFR, Part 136; or where no methods are specified for a given pollutant, by methods approved by the Regional Board or State Board. The laboratory conducting analyses shall be certified by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP) or approved by the Regional Board for that particular parameter. A copy of the laboratory certification shall be submitted with the annual summary report.
3. Water/wastewater samples must be analyzed within allowable holding time limits as specified in 40 CFR, Part 136.3. All QA/QC analyses must be run on the same dates that samples are actually analyzed. The Discharger shall retain the QA/QC documentation in its files and make available for inspection and/or submit them when requested by the Regional Board. Proper chain of custody procedures must be followed and a copy of that documentation shall be submitted with the monthly report.
4. For all bacteriological analyses, sample dilutions should be performed so the range of values extends from 2 to 16,000. The detection methods used for each analysis shall be reported with the results of the analyses.

Detection methods used for coliforms (total and fecal) shall be those presented in Table 1A of 40 CFR, Part 136 (revised May 14, 1999), unless alternate methods have been approved in advance by the United State Environmental Protection Agency (USEPA) pursuant to 40 CFR Part 136.

Detection methods used for enterococcus shall be those presented in the USEPA publication EPA 600/4-85/076, *Test Methods for Escherichia coli and Enterococci in Water By Membrane Filter Procedure* or any improved method determined by the Regional Board to be appropriate.

III. REPORTING REQUIREMENTS

1. The monitoring report shall specify the USEPA analytical method used, the Method Detection Limit (MDL), the minimum level (ML) and the reported Minimum Level (RML) for each pollutant. The MLs are those published by the State Board in the *Policy for the Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California*, (revised May 31, 2005), Appendix 4. The ML represents the lowest quantifiable concentration in a sample based on the proper application of all method-based analytical procedures and the absence of any matrix interference. When all specific analytical steps are followed and after appropriate application of method specific factors, the ML also represents the lowest standard in the calibration curve for that specific analytical technique. When there is deviation from the method analytical procedures, such as dilution or concentration of samples, other factors may be applied to the ML depending on the sample preparation. The resulting value is the reported minimum level.
2. The Discharger shall select the analytical method that provides a ML lower than the permit limit established for a given parameter, unless the Discharger can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR, Part 136, and obtains approval for a higher ML from the Executive Officer, as provided for in III.E. of this section. If the effluent limitation is lower than all the MLs in Appendix 4, SIP, the Discharge must select the method with the lowest ML for compliance purposes. The Discharger shall include in the Annual Summary Report a list of the analytical methods employed for each test.
3. The Discharger shall instruct its laboratories to establish calibration standards so that the ML (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve. In accordance with section 5, below, the Discharger's laboratory may employ a calibration standard lower than the ML in Appendix 4 of the SIP.
4. For the purpose of reporting compliance with numerical effluent limitations and receiving water limitations, analytical data shall be reported using the following reporting protocols:
 - A. Sample results greater than or equal to the RML must be reported "as measured" by the laboratory (i.e., the measured chemical concentration in the sample); or
 - B. Sample results less than the RML, but greater than or equal to the laboratory's MDL, must be reported as "Detected, but Not Quantified", or DNQ. The laboratory must write the estimated chemical concentration of the sample next to DNQ as well as the words "Estimated Concentration" (may be shortened to Est. Conc.); or
 - C. Sample results less than the laboratory's MDL must be reported as "Not-Detected", or ND.

5. In accordance with Section 2.4.3 of the SIP, the Regional Board Executive Officer, in consultation with the State Board's Quality Assurance Program Manager, may establish an ML that is not contained in Appendix 4 of the SIP to be included in the discharger's permit in any of the following situations:
 - A. When the pollutant under consideration is not included in Appendix 4, SIP;
 - B. When the discharger and the Regional Board agree to include in the permit a test method that is more sensitive than those specified in 40 CFR, Part 136 (revised as of May 14, 1999);
 - C. When a discharger agrees to use an ML that is lower than those listed in Appendix 4;
 - D. When a discharger demonstrates that the calibration standard matrix is sufficiently different from that used to establish the ML in Appendix 4 and proposes an appropriate ML for the matrix; or,
 - E. When the discharger uses a method, which quantification practices are not consistent with the definition of the ML. Examples of such methods are USEPA-approved method 1613 for dioxins, and furans, method 1624 for volatile organic substances, and method 1625 for semi-volatile organic substances. In such cases, the discharger, the Regional Board, and the State Water Resources Control Board shall agree on a lowest quantifiable limit and that limit will substitute for the ML for reporting and compliance determination purposes.

If there is any conflict between foregoing provisions and the State Implementation Policy (SIP), the provisions stated in the SIP (Section 2.4) shall prevail.

6. If the Discharger samples and performs analyses (other than for process/operational control, startup, research, or equipment testing) on any influent, effluent, or receiving water constituent more frequently than required by this Program using approved analytical methods, the results of those analyses shall be included in the report. These results shall be reflected in the calculation of the average used in demonstrating compliance with average effluent, receiving water, etc., limitations.
7. The Discharger shall develop and maintain a record of all spills, overflows, or bypasses of raw or partially treated sewage from its collection system or treatment plant, according to the requirements in the WDR section of this Order. This record shall be made available to the Regional Board upon request and a spill summary shall be included in the annual summary report.
8. The Discharger shall inform the Regional Board well in advance of any construction activity that could potentially affect compliance with applicable requirements.

IV. MONITORING REQUIREMENTS

1. Pursuant to the Code of Federal Regulations [40 CFR, Section 122.41(j) and Section 122.48(b)], the monitoring program for a discharger receiving an NPDES permit must be designed to determine compliance with NPDES permit terms and conditions, and demonstrate that State water quality standards are met.
2. Since compliance monitoring focuses on the effects of a point source discharge, it is not designed to assess impacts from other sources of pollution (e.g., non-point source runoff, aerial fallout) or to evaluate the current status of important ecological resources on a regional basis.

A Watershed-wide Monitoring Program will be developed within one year from the effective date of this Order and permit for the Los Angeles River Watershed. The goals of the watershed-wide monitoring program will include evaluating or assessing: compliance with receiving water objectives, trends in surface water quality, impacts to beneficial uses, the health of the biological community, data needs for modeling contaminants of concern, and attaining the goals of the TMDLs under implementation in the Los Angeles River. The Discharger shall participate in the development and implementation of the watershed-wide monitoring program, and submit a copy of the draft Watershed-wide Monitoring Program by December 31, 2007, to the Regional Board.

3. Changes to the compliance monitoring program may be required to fulfill the goals of the watershed-wide monitoring program, while retaining the compliance monitoring component required to evaluate compliance with the NPDES permit. Revisions to the Discharger's program will be made under the direction of the Regional Board, as necessary, to accomplish the goal, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, and/or the number of samples collected.
4. Until such time when a watershed-wide monitoring program is developed, the City shall implement the monitoring program in the following sections.

V. INFLUENT MONITORING REQUIREMENTS

(Footnotes are on pages T-26 and T-28)

1. Influent monitoring is required:
 - A. To determine compliance with the permit conditions for BOD₅ 20°C and suspended solids removal rates;
 - B. To assess treatment plant performance;
 - C. To assess the effectiveness of the Pretreatment Program; and,

D. As a requirement of the Pollution Minimization Program.

2. Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and/or where representative samples of the influent can be obtained. The date and time of sampling shall be reported with the analytical results.
3. Samples for influent BOD₅20°C and suspended solids analysis shall be obtained on the same day that the effluent BOD₅20°C and suspended solids samples are obtained to demonstrate percent removal. Similarly, sampling for other constituents shall also be coordinated with effluent sampling.
4. The following shall constitute the influent monitoring program:

CTR #	Constituents	Units	Type of Sample	Minimum Frequency of Analysis
	Flow	mgd	recorder	continuous ^[1]
	pH	pH units	grab	weekly
	Suspended solids	mg/L	24-hour composite	weekly
	BOD ₅ 20°C	mg/L	24-hour composite	weekly
	MBAS	mg/L	24-hour composite	weekly
4	Cadmium	µg/L	24-hour composite	quarterly
5	Total Chromium	µg/L	grab	quarterly
5a	Chromium III	µg/L	grab	quarterly
5b	Chromium (VI)	µg/L	grab	quarterly
6	Copper	µg/L	24-hour composite	quarterly
7	Lead	µg/L	24-hour composite	quarterly
8	Mercury	µg/L	24-hour composite	quarterly
10	Selenium	µg/L	24-hour composite	quarterly
13	Zinc	µg/L	24-hour composite	quarterly
14	Cyanide	µg/L	grab	quarterly
16	2,3,7,8-TCDD	µg/L	grab	semiannually
23	Dibromochloromethane	µg/L	grab	quarterly
27	Dichlorobromomethane	µg/L	grab	quarterly
68	Bis(2-ethylhexyl)phthalate	µg/L	grab	quarterly
105	Lindane (gamma-BHC)	µg/L	24-hour composite	quarterly
	Total Trihalomethanes ^[2]	µg/L	grab	quarterly
	Iron	µg/L	24-hour composite	quarterly
	Remaining EPA priority pollutants excluding asbestos	µg/L	24-hour composite/ grab for VOCs	semiannually

VI. EFFLUENT MONITORING REQUIREMENTS

(Footnotes are on pages T-26 and T-28)

1. Effluent monitoring is required to:
 - A. Determine compliance with NPDES permit conditions;
 - B. Identify operational problems and aid in improving plant performance;
 - C. Provide information on wastewater characteristics and flows for use in interpreting water quality and biological data; and,
 - D. Determine Reasonable Potential Analysis for toxic pollutants.
2. An effluent sampling station shall be located downstream of any in-plant return flows where representative samples of the effluent can be obtained. Any changes in sampling station locations must be approved by the Executive Officer.
3. The following shall constitute the effluent monitoring program for Discharge Serial No. 002:

CTR #	Constituents	Units	Type of Sample	Minimum Frequency of Analysis
	Total waste flow	mgd	recorder	continuous ^[1]
	Turbidity ^[1]	NTU	recorder	continuous ^[1]
	Total residual chlorine	mg/L	recorder	Continuous ^[1, **, ***]
	Total residual chlorine	mg/L	grab *	daily ****
	Total coliform ^[3]	MPN/100 ml	grab	daily
	Fecal coliform ^[3]	MPN/100 ml	grab	daily
	E. coli	MPN/100 ml	grab	weekly
	Temperature ^[4]	°F	grab/ recorder	daily/ continuous
	pH	pH units	grab	daily
	Settleable solids	ml/L	grab	daily
	Suspended solids	mg/L	24-hour composite	daily
	BOD ₅ 20°C ^[5]	mg/L	24-hour composite	weekly
	Oil and grease	mg/L	grab	monthly
	Dissolved oxygen	mg/L	grab	monthly
	Total dissolved solids	mg/L	24-hour composite	monthly
	Chloride	mg/L	24-hour composite	monthly
	Sulfates	mg/L	24-hour composite	monthly
	Boron	mg/L	24-hour composite	monthly
	Fluoride	mg/L	24-hour composite	quarterly
	Ammonia nitrogen	mg/L	24-hour composite	monthly
	Nitrate nitrogen	mg/L	24-hour composite	monthly
	Nitrite nitrogen	mg/L	24-hour composite	monthly

CTR #	Constituents	Units	Type of Sample	Minimum Frequency of Analysis
	Organic nitrogen	mg/L	24-hour composite	monthly
	Total nitrogen	mg/L	24-hour composite	monthly
	Surfactants (MBAS) ^[6]	mg/L	24-hour composite	monthly
	Surfactants (CTAS) ^[6]	mg/L	24-hour composite	monthly
	Total hardness (CaCO ₃)	mg/L	24-hour composite	monthly
	Chronic toxicity ^[7]	TUc	24-hour composite	monthly
	Acute toxicity ^[8]	% Survival	grab	quarterly
	Perchlorate ^[9]	µg/L	grab	semiannually
	1,4-Dioxane ^[10]	µg/L	grab	semiannually
	1,2,3-Trichloropropane ^[11]	µg/L	grab	semiannually
	MTBE ^[12]	µg/L	grab	semiannually
	Barium	µg/L	24-hour composite	quarterly
	Iron	µg/L	24-hour composite	monthly
	Manganese	µg/L	24-hour composite	monthly
	Total Trihalomethanes ^[2]	µg/L	24-hour composite	monthly
1	Antimony	µg/L	24-hour composite	quarterly
2	Arsenic	µg/L	24-hour composite	monthly
3	Beryllium	µg/L	24-hour composite	semiannually
4	Cadmium	µg/L	24-hour composite	monthly
5a	Chromium III	µg/L	grab	monthly
5b	Chromium VI	µg/L	grab	monthly
6	Copper	µg/L	24-hour composite	monthly
7	Lead	µg/L	24-hour composite	monthly
8	Mercury	µg/L	24-hour composite	monthly
9	Nickel	µg/L	24-hour composite	quarterly
10	Selenium	µg/L	24-hour composite	monthly
11	Silver	µg/L	24-hour composite	quarterly
12	Thallium	µg/L	24-hour composite	semiannually
13	Zinc	µg/L	24-hour composite	monthly
14	Cyanide	µg/L	grab	monthly
16	2,3,7,8-TCDD (Dioxin) ^[13]	ng/L	24-hour comp.	semiannually
18	Acrylonitrile	µg/L	24-hour comp.	semiannually
20	Bromoform	µg/L	grab	monthly
21	Carbon tetrachloride	µg/L	24-hour comp.	quarterly
23	Dibromochloromethane	µg/L	grab	monthly
26	Chloroform	µg/L	grab	monthly
27	Bromodichloromethane	µg/L	grab	monthly
68	Bis(2-ethylhexyl)phthalate	µg/L	24-hour comp.	monthly
105	Gamma-BHC (Lindane)	µg/L	24-hour composite	monthly
	2,4-D	µg/L	24-hour composite	semiannually

CTR #	Constituents	Units	Type of Sample	Minimum Frequency of Analysis
	2,4,5-TP (Silvex)	µg/L	24-hour composite	semiannually
	Diazinon ^[14]	µg/L	24-hour composite	semiannually
	Pesticide ^[15]	µg/L	24-hour composite	semiannually
	Remaining EPA priority pollutants excluding asbestos	µg/L	24-hour composite/ grab for VOCs	semiannually
	Radioactivity ^[16]	PCi/L	24-hour composite	semiannually

4. Toxicity Testing – Applicable for both Effluent and Receiving Waters

A. Acute Toxicity Testing

- a. The Discharger shall conduct acute toxicity tests on 100 % effluent and receiving water grab samples by methods specified in 40 CFR Part 136, which cites USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October, 2002 (EPA-821-R-02-012) or a more recent edition to ensure compliance.
- b. The fathead minnow, *Pimephales promelas*, shall be used as the test species for fresh water discharges and the topsmelt, *Atherinops affinis*, shall be used as the test species for brackish discharges. However, if the salinity of the receiving water is between 1 to 32 parts per thousand (ppt), then Discharger may have the option of using the inland silverside, *Menidia beryllina*, instead of the topsmelt. The method for topsmelt is found in USEPA's *Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms*, October, 2002 (EPA-821-R-02-012).
- c. In lieu of conducting the standard acute toxicity testing with the fathead minnow, the Discharger may elect to report the results or endpoint from the first 48 hours of the chronic toxicity test as the results of the acute toxicity test, but only if the Discharger uses USEPA's August 1993 protocol (EPA/600/4-90/027F) to conduct the chronic toxicity test.
- d. If either of the effluent or receiving water toxicity requirements in Section I.A.11.b.i. or I.A.11.b.ii. and Section I.B.18., respectively, of this Order is not met, the Discharger shall conduct six additional tests over a six-week period. The Discharger shall ensure that results of a failing acute toxicity test are received by the Discharger within 24 hours of completion of the test and the additional tests shall begin within 3 business days of receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity.

Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet the objective.

- e. If the initial test and any of the additional six acute toxicity bioassay tests results are less than 70% survival, the Discharger shall immediately implement Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan. Once the sources are identified the Discharger shall take all reasonable steps to reduce toxicity to meet the requirements.

B. Chronic Toxicity Testing

- a. The Discharger shall conduct critical life stage chronic toxicity tests on 24-hour composite 100% effluent samples and receiving water samples in accordance with EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*, October 2002 (EPA-821-R-02-013) or EPA's *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms*, October 2002 (EPA-821-R-02-014), or current version.
- b. Effluent samples shall be collected after all treatment processes, including the Burbank WRP's dechlorination process, and before discharge to the receiving water. After a sample is collected it should not be further dechlorinated prior to submittal to the laboratory. Receiving water samples shall be collected in accordance with the conditions specified in this MRP (CI-4424). Receiving water samples shall be collected at mid-depth, when possible.
- c. Test Species, Methods and Units:
 - i. Screening and Monitoring - The Discharger shall conduct short-term tests with the cladoceran, water flea (*Ceriodaphnia dubia* - survival and reproduction test), the fathead minnow (*Pimephales promelas* - larval survival and growth test), and the green alga (*Selenastrum capricornutum* - growth test) as an initial screening process for a minimum of three, but not to exceed, five suites of tests to account for potential variability of the effluent and receiving water. After this screening period, monitoring shall be conducted using the most sensitive species. This is applicable to new dischargers.
 - ii. Re-screening - Re-screening is required every 24 months, but may be performed annually at the discretion of the City. The Discharger shall re-screen with the three species listed above and continue to monitor with the most sensitive species. If the first suite of re-screening tests demonstrates that the same species is the most sensitive then the re-screening does not need to include more than one suite of tests. If a different species is the most sensitive or if there is ambiguity, then the

Discharger shall proceed with suites of screening tests for a minimum of three, but not to exceed five suites.

- iii. Toxicity Units - The presence of chronic toxicity shall be estimated as specified in EPA's *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to Freshwater Organisms*, October 2002 (EPA-821-R-02-013), expressed as:

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

d. Accelerated Monitoring

If toxicity is detected as defined in Order No. R4-2006-0085, Section I.A.12.c. or Section I.B.19.c., then the Discharger shall conduct six additional tests, approximately every 7 days, over a six-week period. The samples shall be collected and the tests initiated no less than 7 days apart. The Discharger shall ensure that they receive results of a failing chronic toxicity test within 24 hours of the completion of the test and the additional tests shall begin within 3 business days of the receipt of the result.

- i. If any three out of the initial test and the six additional tests results exceed 1.0 TU_c , the Discharger shall immediately implement the Initial Investigation of the TRE.
- ii. If implementation of the initial investigation TRE Workplan indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the normal sampling frequency required in Sections VI.3 and VII.2. of this MRP.
- iii. If all of the six additional tests required above do not exceed 1 TU_c , then the Discharger may return to the normal sampling frequency required in Sections VI.3. and VII.2. of this MRP.
- iv. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

C. Quality Assurance

- a. Concurrent testing with a reference toxicant shall be conducted. Reference toxicant tests shall be conducted using the same test conditions as the effluent toxicity tests (e.g., same test duration, etc).
- b. If either the reference toxicant test or effluent test or receiving water does not meet all test acceptability criteria (TAC) as specified in the test methods manuals (EPA-821-R-02-013 and EPA-821-R-02-014), then the Discharger must re-sample and re-test within 14 days.
- c. Control and dilution water for effluent should be receiving water or laboratory water, as appropriate, as described in the manuals. If the dilution water used is different from the culture water, a second control using culture water shall be used.

D. Steps in TRE and TIE

- a. Following a TRE trigger, the Discharger shall initiate a TRE in accordance with the facility's initial investigation TRE Workplan. At a minimum, the Discharger shall use EPA manual EPA/833B-99/002 (municipal) as guidance, or current version. The Discharger shall expeditiously develop a more detailed TRE Workplan for submittal to the Executive Officer within 15 days of the trigger, that will include but not limited to:
 - i. Further actions to investigate and identify the cause of toxicity;
 - ii. Actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity;
 - iii. Standards the Discharger will apply to consider the TRE complete and for the return to normal sampling frequency; and,
 - iv. A schedule for these actions.
- b. The following is a stepwise approach in conducting the TRE:
 - i. Step 1 includes basic data collection. Data collected as part of the accelerated monitoring required may be used to conduct the TRE.
 - ii. Step 2 evaluates optimization of the treatment system operation, facility housekeeping, and the selection and use of in-plant process chemicals.
 - iii. If Steps 1 and 2 are unsuccessful, Step 3 implements a TIE employing all reasonable efforts, and using currently available TIE

methodologies. The objective of the TIE is to identify the substance or combination of substances causing the observed toxicity.

- iv. Assuming successful identification or characterization of the toxicant(s), Step 4 evaluates final effluent treatment options;
- v. Step 5 evaluates within plant treatment options; and,
- vi. Step 6 consists of confirmation once a toxicity control method has been implemented.

Many recommended TRE elements parallel source control, pollution prevention, and storm water control program best management practices (BMPs). To prevent duplication of efforts, evidence of implementation of these control measures may be sufficient to comply with TRE requirements. By requiring the first steps of a TRE to be accelerated testing, a TRE may be ended in its early stages. All reasonable steps shall be taken to reduce toxicity to the required level. The TRE may be ended at any stage if monitoring finds there is no longer toxicity (or six consecutive chronic toxicity results less than or equal to 1 TUC (monthly median).

- c. The Discharger shall initiate a TIE as part of the TRE process to identify the cause(s) of toxicity. The Discharger shall use the EPA acute and chronic manuals, EPA/600/6-91/005F (Phase I) /EPA/600/R-96-054 (for marine), EPA/600/R-92/080 (Phase II), and EPA-600/R-92/081 (Phase III) as guidance, or current version .
- d. If a TRE/TIE is initiated prior to completion of the accelerated testing schedule required, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.
- e. Toxicity tests conducted as part of a TRE/TIE may also be used for compliance, if appropriate.
- f. The Board recognizes that toxicity may be episodic and identification of causes of and reduction of sources of toxicity may not be successful in all cases. Consideration of enforcement action by the Board will be based in part on the Discharger's actions and efforts to identify and control or reduce sources of consistent toxicity.
 - i. If all the results of the six additional tests are in compliance with the chronic toxicity 1 TUC trigger, the Discharger may resume regular monthly testing.
 - ii. If the results of any of the six accelerated tests exceeds 1 TUC, the Discharger shall continue to monitor weekly until six consecutive weekly

tests are in compliance. At that time, the Discharger may resume regular monthly testing.

- iii. If the results of two of the six tests, or any two tests in a six-week period, exceed 1 TUc, the Discharger shall initiate a TRE.
- iv. If implementation of the initial investigation TRE workplan (see item E, below) indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the regular testing frequency.

E. Preparation of an Initial Investigation TRE Workplan

Within 90 days of the effective date of this Order and permit, the Discharger shall submit a copy of its initial investigation TRE workplan to the Executive Officer of the Regional Board for approval. The Discharger shall use the USEPA manual, *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants*, EPA/833B-99/002, as guidance, or current version. This workplan shall describe the steps the Discharger intends to follow if the toxicity exceeds 1 TUc, and should include, at a minimum, the following:

- a. Description of the investigation and evaluation techniques that will be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;
- b. Description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and,
- c. If a TIE is necessary, an indication of the person who will conduct the TIE (i.e., an in-house expert or an outside contractor), or current version.

F. Ammonia Removal

- a. Except with prior approval from the Executive Officer of the Regional Board ammonia shall not be removed from the bioassay samples. The Discharger must demonstrate the effluent toxicity is caused by ammonia because of increasing test pH when conducting the toxicity test. It is important to distinguish the potential toxic effects of ammonia from other pH sensitive chemicals, such as certain heavy metals, sulfide, and cyanide. The following may be steps to demonstrate the toxicity is caused by ammonia and not other toxicants before the Executive Officer of the Regional Board would allow for control of pH in the test.
 - i. There is consistent toxicity in the effluent/receiving water and the maximum pH in the toxicity test is in the range to cause toxicity due to increased pH.

- ii. Chronic ammonia concentrations in the effluent/receiving water are greater than 4 mg/L total ammonia. The level of detection for total ammonia generally need not be below 0.5-1.0 mg/L, since concentrations < 1.0 mg/L of total ammonia have not been found to be toxic to fathead minnows and *Ceriodaphnia dubia* (Acute ammonia LC₅₀ values of 3 mg/L and 1 mg/L for *Ceriodaphnia dubia* and fathead minnows, respectively, at pH 8.0). Then,
 - iii. Conduct the graduated pH tests as specified in the toxicity identification evaluation methods. For example, mortality should be higher at pH 8 and lower at pH 6.
 - iv. Treat the effluent with a zeolite column to remove ammonia. Mortality in the zeolite treated effluent should be lower than the non-zeolite treated effluent. Then add ammonia back to the zeolite-treated samples to confirm toxicity due to ammonia.
- b. After it has been demonstrated that toxicity is due to ammonia, pH may be controlled using appropriate procedures which do not significantly alter the nature of the effluent after submitting a written request to the Regional Board, and receiving written permission expressing approval from the Executive Officer of the Regional Board.

G. Reporting

- a. The Discharger shall submit a full report of the toxicity test results, including any accelerated testing conducted during the month as required by this permit. Test results shall be reported in Toxicity Units (TUC) for chronic toxicity, and in percent survival for acute toxicity, with the discharge monitoring reports (DMR) for the month in which the test is conducted.
- b. If an initial investigation indicates the source of toxicity and accelerated testing is unnecessary, pursuant to Section VI.4.D.f.iv of this MRP, then those results also shall be submitted with the DMR for the period in which the investigation occurred.
 - i. The full report shall be submitted by the end of the month in which the DMR is submitted.
 - ii. The full report shall consist of (1) the results; (2) the dates of sample collection and initiation of each toxicity test; (3) the acute toxicity average limit or chronic toxicity limit; and (4) printout of the toxicity program (ToxCalc or CETIS) results.
 - iii. Test results for toxicity tests also shall be reported according to the appropriate manual chapter on Report Preparation and shall be

attached to the DMR. Routine reporting shall include, at a minimum, as applicable, for each test:

- sample date(s)
 - test initiation date
 - test species
 - end point values for each dilution (e.g. number of young, growth rate, percent survival)
 - NOEC value(s) in percent effluent
 - TUC values $\left(TUC = \frac{100}{NOEC}\right)$
 - Mean percent mortality (+standard deviation) after 96 hours in 100% effluent (if applicable)
 - NOEC and LOEC (Lowest Observable Effect Concentration) values for reference toxicant test(s)
 - Available water quality measurements for each test (e.g., pH, D.O., temperature, conductivity, hardness, salinity, ammonia).
- iv. The Discharger shall provide a compliance summary, which includes a summary table of toxicity data from at least eleven of the most recent samples.
- v. The Discharger shall notify this Regional Board immediately of any toxicity exceedance and in writing 14 days after the receipt of the results of a monitoring limit or trigger. The notification will describe actions the Discharger has taken or will take to investigate and correct the cause(s) of toxicity. It may also include a status report on any actions required by the permit, with a schedule for actions not yet completed. If no actions have been taken, the reasons shall be given.

5. Tertiary Filter Treatment Bypasses

- A. During any day that the filters are bypassed, THE CITY shall monitor the effluent for BOD, suspended solids, settleable solids, coliform, and oil and grease, on a daily basis, until it is demonstrated that the filter "bypass" has not caused an adverse impact on the receiving water.

- B. The City shall maintain a chronological log of tertiary filter treatment process bypasses, to including the following:
 - a. Date and time of bypass start and end;
 - b. Total duration time; and,
 - c. Estimated total volume bypassed.
- C. The City shall notify Regional Board staff by telephone within 24 hours of the filter bypass event.
- D. The City shall submit a written report to the Regional Board, according to the corresponding monthly self-monitoring report schedule. The report shall include, at a minimum, the information from the chronological log. Results from the daily effluent monitoring, required by Section VI. 5.A. above, shall be submitted to the Regional Board in the Discharger's self-monitoring report as soon as the results become available.

VII. RECEIVING WATER MONITORING REQUIREMENTS FOR SURFACE WATERS

(Footnotes are on pages T-26 and T-28)

- 1. Receiving water stations shall be established at the locations shown in Figure 3 and as follows:

<u>Station Number</u>	<u>Description</u>
R-1	Burbank Western Channel at its confluence with Lockheed Channel, about 300 feet above the Burbank WRP (upstream of Discharge Serial No. 002)
R-2	Burbank Western Channel at Verdugo Wash (downstream of Discharge Serial No. 002)
R-5	Burbank Western Wash, just upstream of its confluence with the Los Angeles River

- 2. The following analyses, which constitute the receiving water monitoring program, shall be conducted on grab samples obtained at stations R-1, R-2, and R-3:

CTR #	Constituent	Units	Minimum Frequency of Analysis
	Total flow	cfs	monthly
	pH	pH units	monthly
	Temperature	°F	monthly

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 Monitoring and Reporting Program No. CI-4424

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CTR #	Constituent	Units	Minimum Frequency of Analysis
	Dissolved oxygen	mg/L	monthly
	Total residual chlorine	mg/L	weekly
	Total coliform	CFU/100 ml	monthly
	Fecal coliform	CFU/100 ml	monthly
	E.coli	MPN/100 ml	monthly
	Turbidity	NTU	monthly
	BOD ₅ 20°C	mg/L	monthly
	Total dissolved solids	mg/L	monthly
	Conductivity	µmhos/cm	monthly
	Chloride	mg/L	monthly
	Sulfates	mg/L	monthly
	Boron	mg/L	monthly
	Fluoride	mg/L	monthly
	Ammonia nitrogen	mg/L	weekly ^[17]
	Nitrate nitrogen	mg/L	weekly ^[17]
	Nitrite nitrogen	mg/L	weekly ^[17]
	Organic nitrogen	mg/L	weekly ^[17]
	Total nitrogen	mg/L	weekly ^[17]
	Total phosphorus	mg/L	monthly
	Orthophosphate-P	mg/L	monthly
	Algal biomass ^[18]	mg/L	monthly
	Surfactants (MBAS) ^[6]	mg/L	monthly
	Surfactants (CTAS) ^[6]	mg/L	monthly
	Chemical oxygen demand (COD)	mg/L	monthly
	Oil and grease	mg/L	monthly
	Settleable solids	mg/L	monthly
	Suspended solids	mg/L	monthly
	Total hardness (CaCO ₃)	mg/L	monthly
	Chronic toxicity ^[7]	TU _c	quarterly
	Acute toxicity ^[8]	%survival	semiannually
	Perchlorate ^[9]	µg/L	semiannually
	1,4-Dioxane ^[10]	µg/L	semiannually
	1,2,3-Trichloropropane ^[11]	µg/L	semiannually
	MTBE ^[12]	µg/L	semiannually
1	Antimony	µg/L	quarterly
2	Arsenic	µg/L	quarterly
3	Beryllium	µg/L	semiannually
4	Cadmium	µg/L	monthly
5a	Chromium III	µg/L	monthly
5b	Chromium VI	µg/L	monthly
	Total Chromium	µg/L	monthly
6	Copper	µg/L	monthly

CTR #	Constituent	Units	Minimum Frequency of Analysis
	Iron	µg/L	monthly
7	Lead	µg/L	monthly
8	Mercury	µg/L	monthly
9	Nickel	µg/L	quarterly
10	Selenium	µg/L	monthly
11	Silver	µg/L	quarterly
12	Thallium	µg/L	semiannually
13	Zinc	µg/L	monthly
14	Cyanide	µg/L	monthly
16	2,3,7,8-TCDD (Dioxin) ⁽¹³⁾	µg/L	semiannually
17	Acrolein	µg/L	semiannually
18	Acrylonitrile	µg/L	semiannually
19	Benzene	µg/L	semiannually
20	Bromoform	µg/L	monthly
21	Carbon tetrachloride	µg/L	semiannually
22	Chlorobenzene	µg/L	semiannually
23	Dibromochloromethane	µg/L	monthly
24	Chloroethane	µg/L	semiannually
25	2-Chloroethylvinyl Ether	µg/L	semiannually
26	Chloroform	µg/L	monthly
27	Bromodichloromethane	µg/L	monthly
28	1,1-Dichloroethane	µg/L	semiannually
29	1,2-Dichloroethane	µg/L	semiannually
30	1,1-Dichloroethylene	µg/L	semiannually
31	1,2-Dichloropropane	µg/L	semiannually
32	1,3-Dichloropropylene	µg/L	semiannually
33	Ethylbenzene	µg/L	semiannually
34	Methyl bromide	µg/L	semiannually
35	Methyl chloride	µg/L	semiannually
36	Methylene chloride	µg/L	semiannually
37	1,1,2,2-Tetrachloroethane	µg/L	monthly
38	Tetrachloroethylene	µg/L	monthly
39	Toluene	µg/L	semiannually
40	1,2-Trans-Dichloroethylene	µg/L	semiannually
41	1,1,1-Trichloroethane	µg/L	semiannually
42	1,1,2-Trichloroethane	µg/L	semiannually
43	Trichloroethylene	µg/L	semiannually
44	Vinyl chloride	µg/L	semiannually
45	2-Chlorophenol	µg/L	semiannually
46	2,4-Dichlorophenol	µg/L	semiannually